Agent Wallet to Agent Wallet (A2A) Interoperability Rules

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3  **Acceptance of these Standards**
By signing this document, each signatory binds itself to apply these Standards in all Commercial agreements with each of the other signatories of these Standards, including any signatory which signs this document after the date of signature hereof by such first mentioned signatory, for the provision of Mobile Financial, Registered Agent Wallet to Registered Agent Wallet, transfer services (MFSi A2A).
## 3.1 List of participants

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4 Introduction

This document introduces the framework of Standards that are being developed to guide all entities that participate in the delivery of Mobile Financial Services (MFS). This seamless delivery of MFS across all Mobile Financial Service Providers (MFSPs) is referred to as “Interoperability”.

The following Standards cover Registered Agent Wallet-to-Registered Agent Wallet transactions. In other words, we are discussing an Agent sending mobile money from one of his Agent wallets to another of his Agent wallets (sometimes referred to as “A2A”), on Mobile Money systems. These transactions allow Agents to move mobile money between any of their registered Agent wallets.

Other services may be added from time to time with the agreement of MFSPs and will be covered in separate Standards documents applicable to the respective services.

In this document, we follow the GSM Association’s (GSMA’s) definition of Mobile financial services as: the use of a mobile phone to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on a user’s mobile phone. Mobile money, mobile insurance, mobile credit and mobile savings are all mobile financial services.

The overriding vision is to achieve a nationally used and internationally recognised payments system.
4.1 Effects
Becoming a signatory of these Standards will have the effect of compelling the signatories to apply and be bound, unless the parties have made applied for exemption and or made disclosure of such non-compliance, to:

(i) apply all the Standards in agreements with other members;
(ii) fulfil every obligation and duty required of it by the Standards in its agreements with other members; and,
(iii) unless the parties have made applied for exemption and or made disclosure of such non-compliance.

As MFS Providers (MFSPs) put in place commercial agreements with signatories to these Standards, then those agreements should invoke these Standards.

If an MFSP wishes to put in place a commercial agreement with an MFSP that is not a signatory to these Standards, then such a commercial relationship need not invoke these Standards, but these Standards may be used by the non-signatory with the non-signatory having no right to vote on changes to these Standards.

If two MFSPs put in place a commercial agreement and both MFSPs do not wish to comply with certain aspects of these Standards, then areas of non-compliance should be recorded in the bi-lateral agreements and the Central Bank should be notified along with a compliance date if applicable.

4.2 Governing Laws
The Constitution and various Acts of Parliament should be taken into consideration when executing MFSi.

4.3 Inconsistencies
If a provision in these Standards is inconsistent with a provision of the Constitution, the provision of the Constitution prevails.

If a provision of these Standards is inconsistent with a provision in the Laws, the provision of Law prevails.

If a provision of these Standards is inconsistent with a provision of an MFSP’s internal rules for MFSi, the provision of these Standards prevails.

If a provision of these Standards is inconsistent with a provision of a bilateral agreement between the parties the provision of the bilateral agreement prevails.
5 Governance

The MFSi A2A Standards are owned and administered by an A2A Governing Body (AGB) on behalf of, and in the interests of, all signatories participating in A2A MFSi (Participation criteria are defined in Section 6, below). The AGB, taking a vote of all participating MFSPs, may make changes to these Standards, each MFSP having a single vote, irrespective of the size and transaction volume of the MFSP. A 75% majority is needed to make a change to these Standards.

The AGB must be composed of representatives of MFSPs participating in A2A. The MFSPs will elect representatives and a Chairman. The Chairman will serve for a one-year period and other representatives will serve a two-year period.

The AGB should keep an up-to-date list of MFSPs and a primary and secondary contact person at each and so facilitate communication between MFSPs.

5.1 Effective Date
The MFSi Standards will become effective and applicable upon signature.

5.2 Amendments & Waivers

5.2.1 Amendment to these Standards
The AGB may amend these Standards at any time via circulars or any other means and following due process. The AGB circular must specify the effective date of any change to these Standards.

Participating MFSPs may apply to the AGB for a waiver from all or part of these Standards, unless a non-compliance disclosure has been made to the AGB.

5.3 Good Faith Co-operation
Each MFSP must:

(i) perform its obligations under these Standards in good faith; and
(ii) use its best endeavours to co-operate with each other MFSPs and the AGB with respect to these Standards, and any subsidiary rule or documents.
6 Participation in A2A Governing Body (AGB)

Any provider of Mobile Financial Services (MFS):

- issuing e-money
- holding an e-money issuer license from the Central Bank;
- With a commercial agreement for interoperable A2A service on the Receiver Pays Business model with at least 75% incumbent participants (if any);

may participate in the A2A service will be known as an “MFSP”.

The National Payments laws and Mobile Payments Regulations will guide the participation criteria and these Standards.
7  Services & Service Architecture

7.1  Services
The service described in this document is:

- Registered Agent Wallet to Registered Agent Wallet transfers (i.e. Agent wallet rebalancing or “A2A”).

7.2  Functional Flows
The following page contains a generalised functional flow diagram for the Wallet-to-Wallet (A2A) transfer transaction under the Service Architecture preferred by most MFSPs.

7.3  Agent Wallet Verification
MFSPs will verify the receiving Agent Wallet against the counterparty MFSP database before final commitment of the transaction.
8 Business model

8.1 AGB Costs
In relation to the running and management of the AGB each party is to carry its own direct costs and its share of any joint costs as agreed with the other participating parties.

8.2 Mobile Interchange Structure
The business model is a Receiver Pays Business Model with mobile interchange rates negotiated and agreed through bilateral agreements between participants. The following diagram shows an illustrative example of the Receiver Pays model:

8.2.1 Guiding principles:
(i) The business model and the mobile Agent-to-Agent (A2A) Interchange will aim to achieve effective interoperability. Effective interoperability means:

(a) Commercial rules and agreements are in place to enable interoperability.

(b) The inter-party pricing and fees agreed by participants are at a level that do not dis-incentivise any participant (MFSPs, Agents, Subscribers) from making or supporting cross network interoperable transactions.

(c) Technical capability exists to enable transactions in real or near real time.

(d) No surcharging is allowed for off-net transactions with an interoperability agreement where surcharging is the adding of a premium to the price of a transaction.

(ii) Mobile A2A interchange will be used where necessary to achieve the balanced economics required to ensure that A2A interoperability can be achieved. This may lead to different interchange rates for different use cases.
(iii) The A2A interoperable business model is a “Receiver Pays” model. The receiving MFSP will pay the mobile A2A interchange to the sending MFSP (see diagram above).

(iv) Mobile A2A interchange rates will be agreed between parties via one or more agreements between MFSPs.

(v) MFSPs will calculate mobile A2A interchange amounts due to/from each other periodically (daily, weekly, monthly) and bill/pay each other according to their agreements.

(vi) Subscriber and agent pricing remains the preserve of MFSPs, including the discretion to differentiate the pricing between on and off network transactions.

(vii) The business model and the setting of mobile A2A interchange rates will be compliant with all prevailing regulations.

(viii) Mobile A2A interchange will be based on the net of all interoperable A2A flows. Following the interchange calculation from this and from other use cases (e.g. P2P) interchange amounts due to/from participants can be netted off across multiple use cases with the agreement of the counterparty MFSP.

8.2.2 Fees for Failed and/or Disputed Transactions

Fees may optionally be levied against Receiving Agents, and/or other MFSPs as the case may be for recovery of disputed value.

Any agent fees that may be charged for failed transactions or for the reversal of disputed transactions are at the MFSP’s discretion.

Where applicable and as may be agreed, these fees could be apportioned between the two MFSPs that participated in the interoperable transaction (sender and receiver MFSPs).
9 Clearing and Prefunding

9.1 General Principles of Clearing

9.1.1 Provision of Information
Each MFSP agrees to provide all other MFSPs with sufficient and accurate information to allow all parties to clear and prefund MFSi transactions.

9.1.2 Obligation to Credit
An MFSP is obliged to credit the account of the intended beneficiary wallet when a valid A2A transaction is received from another MFSP where the sending MFSP has provided sufficient liquidity to fund the transaction from the sending MFSP disbursal account on the receiving MFSP platform.

Minimum replenishment thresholds and alerts on the sending MFSP disbursal account must be maintained by MFSPs.

9.1.3 Returned Transactions
An MFSP is obliged to return received e-Value to the Sending MFSP if the MFSP is for any reason unable to credit the identified beneficiary wallet. Such a return should not take longer than 30 minutes.

9.1.4 Responsibility for Transactional Errors
In the event of error by the Sender, the onus to rectify the error is on the Sending MFSP, but the MFSP owning the beneficiary wallet must endeavour to assist the Sending MFSP to do so.

In the event of error by the MFSP owning the beneficiary wallet, the onus is on the MFSP owning the beneficiary wallet to rectify the error.

9.2 General Principles of Prefunding
Due to the pre-funded model, MFSPs will not hold each other liable for post settlement obligations since none exist.

Each MFSP should ensure that they adequately prefund their disbursement account to cover all outbound cross-net transactions.
9.3 Prefunding & Clearing Architecture
The diagram below shows how interoperability may be achieved through prefunded e-Value in Agent accounts, using API’s to facilitate bilateral clearing and using the Central Bank’s RTGS system as the ultimate settlement agent:

Notes:

1. e-Value in the MFSP Platforms will always equal cash in the Trust accounts held at banks;
2. inter-bank transactions through RTGS only take place if and when MFSPs have to manage the liquidity for their accounts on the different MFSP platforms and if the trust and banking accounts are held at different banks;
3. all transactions and prefunding instructions are of a bilateral nature, thus essentially no multilateral clearing and settlement related to specific interparty financial transactions applies in this scenario. Inter-bank transactions are purely for liquidity management.

Following are the transaction steps and associated Account Transfers:

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Examples of Account Transfers:

- Debit "A" Agent Account
- Credit "A" Collection Account
- Send DC Message via API Interface
- Debit "A" Disbursement Account on Platform "B"
- Credit "B" Agent Account
- Settle
10 General Operational Considerations
This chapter contains an overview of the Standards that govern the day-to-day operations of the MFSi service. Additional information is contained in Appendix A.

10.1 Testing
All MFSPs participating in MFSi are expected to demonstrate due diligence and to test their respective systems so that the systems have:

- Integrity;
- Reliability;
- Consistency; and
- Scalability.

Note: MFSPs must develop technical test scripts once process and systems architecture have been finalised.

10.2 System Support
All MFSPs should have in place tested processes for supporting the MFSi service once it has gone live. This should include the ability to trouble-shoot and fix network, hardware and software problems.

10.3 Security
All MFSPs, without exception, are expected to take all reasonable steps to guarantee the security of MFS transactions and data.

10.4 Money Laundering
All MFSPs must take reasonable steps specifically to combat Money Laundering and to detect suspicious activities such as smurfing and layering through the MFSi service (including the enforcement of transaction limits and velocity checks) and to comply with all current Legislation.

An annual Anti-Money Laundering (AML) self-audit of MFSi activity should be completed by MFSPs and submitted to the Central Bank on a schedule to be established by the central Bank.

The identity of all individuals sending and receiving e-Value through the MFSi service must be checked by each MFSP using their own customer/Agent data before a transaction completes specifically for Anti-Money Laundering purposes. This will also increase efficiencies by reducing disputes and give a consistent Agent experience.

10.5 Know Your Customer (KYC) And Agent Due Diligence (ADD)
MFSPs must take all reasonable steps to perform Agent Due Diligence (ADD) in accordance with Central Bank rules when registering Agents.

MFSPs must take all reasonable steps to perform KYC checks on MFSi transactions in accordance with Central Bank directives and international best practice.

To reduce the risk of MFSi transactions being disputed, MFSPs should try to harmonise their KYC rules and processes unless doing so would contravene current legislation.
The Sender’s MFSP should check the Sender’s Agent database before sending the transaction. The details held in the Sender’s Agent database would allow the Sender’s MFSP to determine that the transaction was above the Sender’s limit and also other aspects of the Sender’s profile, if so desired. The Sender’s MFSP will not send the transaction, if it breaches the Sender’s KYC limit(s) and will reply to the Sender with an appropriate message whilst respecting the Sender’s confidentiality.

The Receiver’s MFSP should check the Receiver’s Agent database before accepting the transaction. The details held in the Receiver’s Agent database would allow the Receiver’s MFSP to determine that the transaction is above the Receiver’s limit and also other aspects of the Receiver’s profile, if so desired. The Receiver’s MFSP would not accept the transaction if it breaches the receiver’s KYC limit(s) but will reply to the Sending MFSP with an appropriate message whilst respecting the Receiver’s confidentiality.

**10.6 Reporting**

There will be three levels of reporting:

1) Internal reporting that an MFSP produces for its own use;
2) Reporting required by the Central Bank; and,
3) Ad hoc reporting

**10.6.1 Fraud Reporting**

Where there are patterns and particular modus operandi of fraudulent transactions detected in MFSi transactions, MFSPs must provide reports to the Central Bank to a schedule and using criteria defined by the Central Bank.

If particular Agents have been found by one MFSP to be regularly engaging in fraudulent activity and/or AML smurfing, the MFSPs must provide details of these activities to the AGB and the Central Bank using the framework provided by the law. Such reporting would be over and above their legal obligations for AML Suspicious Activity Reports.

**10.7 Service Levels**

MFSPs agree to maximise uptime, minimise latency, and notify counterparties in advance of foreseeable risks/Issues.

**10.8 Retention of Records**

All MFSPs must retain all records generated and/or obtained during the course of the operation and administration of MFSi for a period of at least ten years (or such other period as may be prescribed by an Act of Parliament, or in any other applicable legislation) as from the date of each particular record.

**10.9 Business Continuity Planning**

Each MFSP will make sure that it develops, introduces and maintains an effective and practical business continuity plan, relevant to MFSi systems and procedures, records, audit trails, recovery procedures and human resources, in order to ensure the effective continuity of its participation in the MFSi.
10.10 Agent Support & Investigations

All MFSPs must have designated personnel and processes to undertake timely investigations of any complaints or queries raised by Agents as well as by MFSi counterparties and the Central Bank.

Details of these designated personnel and the Agent support processes must be updated as necessary and communicated to the AGB.
11 Principles for the Management of Agent Disputes

11.1 General Standards
The rules describing the Arbitration process for disputes between MFSPs are contained in a bilateral agreement.

Formal Arbitration should only begin after all avenues of amicable dispute resolution have been exhausted.

11.1.1 Applicable Laws & Jurisdiction
All processes and principles below are subject to, and may be superseded by, laws, regulations, circulars, and orders.

11.1.2 Electronic Media As Evidence
In all cases MFSPs agree to accept audited electronic evidence in cases of disputes.

If a dispute arises over the electronic evidence itself and the parties cannot come to an agreement, then the AGB may call upon the services of an independent third party specialist auditor.

11.1.3 Reversals, Roll-Backs & Refunds
In cases where a transaction has to be reversed, rolled back, or refunded, the MFSPs must, where applicable, re-align their Collection and Disbursement Accounts and individual Agent accounts to reflect the values and fees. Such re-alignment should be completed in a timely manner.

11.1.4 No Disintermediation
No MFSP may directly contact the Agent of another MFSP regarding a disputed transaction unless both MFSPs have pre-agreed to such contact.

11.1.5 Agent Communications
In all cases of dispute, the MFSPs must maintain clear, accurate, timely and consistent communications to their Agents in both the local language and English (if English is not the local language).

11.1.6 Location Data
In the case of any dispute, location data of the transaction participants must be shared on request. This must be done in a timely manner so as to mitigate the risk of fraud and/or mistake.

11.1.7 General Principles For The Recovery of Disputed Value:
A Receiving Agent’s MFSP may, subject to the conditions below, generally attempt to recover any value that is subject to a dispute if the value in dispute has not been withdrawn from the Receiving Agent’s MFS account.

Disputed values should be debited from Receiving Agent’s account and be no longer visible and not available, to the Receiving Agent. The disputed value should be held frozen or placed in a Suspense Account until the investigation into the dispute completes, whereupon the values are credited to the Receiving Agent’s account or credited to the Sender’s account, as the case may be.

Fees for the recovery of disputed values may be levied against Agents and/or other MFSPs at the discretion of the MFSP making the recovery.
Where the dispute arose because of a system error, any applicable transaction fees shall be refunded to the affected parties.

11.1.8 General Process To Report & Resolve A2A Disputes
The following is a general procedure that must be followed by MFSPs when resolving disputes.

Any process for recovery of disputed values should recognise the relatively limited investigative capabilities MFSPs may have. Therefore, MFSPs should apply their best efforts in attempting to resolve Agent disputes. The generalised process noted below may need to be modified when fraud is suspected, or where the Receiving MFSP has been ordered by an appropriate Authority or court to take other steps.

The process described below must be clearly explained in the T&Cs provided to Agents.

Step 1: The Agent calls the MFSP whose Wallet they are attempting to debit.

Step 2: Within 30 minutes of the dispute being raised by the Agent, the MFSP sending e-Value contacts the MFSP receiving the e-Value. If both MFSPs agree, electronic messages may be used in place of telephone calls.

Step 3: The two MSFPs discuss the disputed transaction and if the funds are still in the Recipient’s account, the Receiving Agent’s MFSP may freeze the disputed value from being used.

Step 4: The Receiving MFSP calls the Receiving Agent and asks permission to initiate a transaction reversal and refund.

Step 5: If the Recipient agrees to the reversal, a reversal and refund process is executed and the Sender is notified by the Sender Agent’s MFSP.

The Receiving Agent’s MFSP proceeds to Step 6 if the Receiving Agent does not agree to the reversal.

Step 6: The funds if frozen in the Recipient’s account are released by the Recipient’s MFSP, once proper verification of the need for a reversal has been done by the Recipient’s MFSP.

Step 7: The Recipient’s MFSP contacts the Sender’s MFSP to tell them that the funds cannot be recovered, and the reason why.

Step 8: The Sender’s MFSP calls the Sender to tell them that the funds cannot be recovered, providing the reason given to the Sender’s MFSP by the Recipient’s MFSP.

Step 9: The Sending Agent may take separate steps such as legal action to recover the funds.

11.1.9 Fraudulent Disputes
MFSPs must take all reasonable steps to make sure that transactions are not being disputed fraudulently. Only once an MFSP has determined to the best of their ability that a disputed transaction is genuine, may an attempt be made to recover the disputed value.

In all other cases, MFS accounts and values sent and/or received may be subject to being grey-listed, suspended, or transactions reversed where directed by a court of law.
11.1.10 Good Faith
The legal principle of Good Faith is used in banking law and will be generally applied to MFSi transactions.

This principle generally protects those who have received value in good faith from a Sender who was not entitled to that value.

In such cases, the value received by a Receiving Agent who was unaware of the origins of the value received should be frozen if still in the Receiving Agent’s account and should not be automatically reversed by the Receiving Agent’s MFSP without an investigation first having been conducted.

However, if it is suspected that fraud/collusion/bad faith has occurred, an MFS account may be suspended, or grey-listed, or the value received blocked from use while a legal investigation is conducted, and/or a court of law directs that this should be done and how it should be done.

11.1.11 Time Frames For Dispute Response
MFSPs will allocate any reported disputes to appropriate personnel for immediate investigation and will endeavour to respond to disputes within 10 working days.

11.1.12 Grey-Listing Of MFS Accounts
Grey-Listing is an MFSP process of only allowing certain transactions and/or use of value to take place on an MFS account. Generally this means that a grey-listed MFS account will only be able to accept in-bound transactions, and/or that specific values subject to a dispute may not be transacted with by that the holder of the MFS account.

Where there is a dispute regarding received value, the Receiving Agent’s MFSP will apply their best judgement as to whether to grey-list the account of a Receiving Agent.

Where there is prima facie evidence of fraud or other malpractices by an Agent, MFSPs also have the option to grey-list the account of that Agent.

11.1.13 Network Delays
To avoid disputes arising from network delays, the two MFSP systems should exchange electronic handshakes. A ‘handshake’ is a term used to describe the process of one computer establishing or confirming a connection with another computer.

If the handshake is replied to, then the transaction will go though at a system level.

If the handshake is not replied to within an agreed number of seconds, then the handshake may be repeated an agreed number of times.

If all handshake attempts fail, then the MFSP system detecting the failure of a handshake should generate an error message and the transaction should automatically be reversed. In this case, the Sender should not be charged a transaction fee.

All MFSPs agree that a problem ‘ticket’ should be created so that the root cause of the issue may be discovered and fixed.

All parties agree to resolve any technical issues as quickly as reasonably possible and to allocate resources 24 hours per day, 7 days per week to the resolution of technical issues.
11.2 Specific Examples
This Section describes some of the areas for Agent disputes for A2A transactions in an MFSi environment and suggests processes for handling the dispute in each such case.

The following list is not exhaustive and further examples may be added from time to time:

11.2.1 Money sent to the wrong Agent (“error in personam”)  
There may be circumstances where an Agent has sent value to an incorrect mobile phone number.

Once the Sending Agent becomes aware of the error, a dispute may be initiated according to the process set out in clause 11.1.8 above.

11.2.2 Network Delays Resulting In Duplicate Transactions Being Sent  
There may be circumstances where a Receiving Agent’s MFSP and/or the Sending Agent’s MFSP experiences a network delay or outage. This may result in a delay in sending the Receiving Agent the usual transaction confirmatory message(s) indicating that an A2A transaction has been fully processed. In such cases, the Sending Agent may think that the transaction has not completed and so performs the transaction again.

Once the Sender becomes aware of the error, a dispute may be initiated according to the process set out in clause 11.1.8 above.

11.2.3 Recipient Sent More Value Than Intended  
There may be circumstances where a Receiving Agent wallet has been sent more value than the Sender Agent intended to send.

Once the Sending Agent becomes aware of the error, a dispute may be initiated according to the process set out in clause 11.1.8 above.

11.2.4 Transaction Not Received by the Recipient’s MFSP  
There may be incidents where a Sending Agent has received confirmation from the Sending MFSP that the value and transaction fee have been debited from the Sending Agent’s MFS account, but it is found that the intended Receiving Agent has not received the value or part of the value.

Once the Sending Agent becomes aware of the error, a dispute may be initiated by the Sending Agent using the process set out in clause 11.1.8 above.

Appropriate remedies at an MFSP level will depend on where the fault lies. That is, either with the Sender or Recipient MFSP, or with both MFSPs.

11.2.4.1 Technical Issues With The Sender Agent’s MFSP  
The Sending Agent’s MFSP should check logs of the Sending Agent’s transaction history to determine if the transaction was successfully processed in the Sending Agent’s system and that the transaction data was sent to the Recipients MFSP’s system.

If the Sending Agent MFSP’s transaction logs indicate that the value was sent to the Receiving Agent’s MFSP, then the Sending Agent’s MFSP should contact the Receiving Agent’s MFSP to track the transaction.
If the transaction data was never received by the intended Receiving Agent’s MFSP, then the Sending Agent’s MFSP should apply the following:

- Validate that the sending account was debited and locate the relevant credit in the applicable Suspense Account
- Reverse the transaction in the Sending Agent’s MFS account by crediting the Sending Agent’s MFS account for the full value sent, as well as for the full transaction fee charged to the Sender for that transaction, and
- Generate an error ticket with the technical team to inspect the relevant APIs and initiate testing so as to trace the transaction failure, and if needed, remedy any errors or deficiencies in the system to prevent any future similar occurrences. Inspection and remedy should take place within a reasonable period of time.

11.2.4.2 Technical Issues With The Recipient’s MFSP

If it is found that the Receiving Agent’s MFSP’s system received the transaction data from the Sender Agent’s MFSP, but for technical and/or operational reasons the Receiving Agent’s MFSP did not credit the value received to the Receiving Agent’s MFS account, then the Receiving Agent’s MFSP should apply the following:

- Immediately release the value and post the value to the Receiving Agent’s account, notifying the Recipient, and
- Notify the Senders MFSP that the Receiving Agent’s MFS account has been credited with the full, sent value.
- Generate an error ticket with the technical team to inspect the relevant APIs and initiate testing so as to trace the transaction failure, and if needed, remedy any errors or deficiencies in the system to prevent any future similar occurrences. Inspection and remedy should take place within a reasonable period of time.

11.2.5 e-Value Only Partially Credited

Circumstances may arise when a Recipient wallet does not receive the full e-Value expected from the A2A process. This may be, for example, the result of system issues and/or unauthorised charges.

If the full, correct values are not in the Recipient wallet, the Sending Agent’s MFSP must be contacted so as to report the issue and to initiate an investigation.

The Sending Agent’s MFSP should generate an error ticket with their technical personnel to inspect the relevant APIs and initiate testing so as to trace the issue if needed, remedy any errors or deficiencies in the system so as to prevent any future similar occurrences. The time frame for such inspection and technical remedy should be less than 24 hours.

The time frame reverting to the Sending Agent’s MFSP and concluding the remedy related to incorrect e-Value should be less than 24 hours.
12 Risk management

All MFSPs in MFS should be aware of the risks they face and must take appropriate mitigating action for each and every risk.

To reduce the risk of MFSi transactions being disputed, MFSPs should try to harmonise the wording of their Agent Terms & Conditions as well as the wording used for reporting errors to Agents - unless doing so would contravene any competition laws and regulations.

Interparty settlement risk is mitigated to a large extent by the pre-funded nature of the business model.

All MFSPs should formally review the risks they face in MFSi at least every 6 months.
13 General Standards of Compliance
All MFSPs will make reasonable efforts to comply with these Standards.

Detailed rules of Compliance are set out in Appendix B.

13.1 Exemptions
Any MFSP may apply to the AGB for an exemption from part of these rules if they feel that they have a valid reason.

To be fair and consistent, these Standards set out the procedures that all MFSPs should follow to apply for an Exemption as well as the procedures that must be followed when evaluating a request for an Exemption.

13.2 Disclosure of Non-Compliance
If an MFSP that has signed this Standards document chooses not to comply with one or more of these Standards, the non-compliant MFSP will disclose its non-compliance to the AGB who can then take impartial and appropriate steps to inform the Central Bank about the non-compliance and, if necessary, other MFSPs.

13.3 Audit
MFSPs participating in A2A will add MFSi to their existing statutory and internal audit process.

13.4 Suspension & Termination
In the event of a termination of bilateral agreements, a participant may no longer qualify for participation in interoperable A2A and would thus be terminated from this agreement.

In addition, an MFSP may voluntarily withdraw from participation in MFSi in accordance with Appendix B.

13.5 Notices
AGB has to notify MFSPs of a change in these Standards in a timely, even-handed and consistent manner.

13.6 Liability for owned & controlled entities
If an MFSP owns a subsidiary company that participates in MFS, then the MFSP is responsible for the actions of its subsidiary.

13.7 Disclosures & Confidentiality
All MFSPs and the AGB have an obligation of confidentiality to all other MFSPs. A statement of Confidentiality is in the Appendices.
14 Appendix A - Operational Requirements

14.1 Testing
On behalf of the Participants, the AGB may from time to time require one or more MFSPs to test their ability to comply with these Standards

The Participant must:

(i) comply with the AGB’s requirements; and
(ii) co-operate with the other Participant(s) involved.

Whenever practicable in the circumstances the AGB will:

(i) consult with the affected Participant as to the scheduling of any testing requirement; and/or
(ii) give the affected Participant reasonable notice of any testing requirement.

14.2 Operational and Security Standards
The AGB may, from time to time with the agreement of and on behalf of all Participants issue and amend Standards applicable to the technical, operational and security aspects of:

(i) MFS Transactions;
(ii) MFS Interoperability activities;
(iii) any other matter covered by these Standards;
(iv) any other matter related or incidental to these matters.

To assist in interpretation of, supplement or provide processes for implementation of matters contained in these Standards, the AGB may from time to time issue (and update) Guidelines. Participants must comply with Guidelines and ensure that their Service Providers do so also.

14.3 Data Security
A Participant that receives Data in respect of an Agent of another Participant while participating in an MFSi Transaction must:

(i) only use that Data to comply with its obligations under these Standards and/or the Operational and Security Standards;
(ii) treat that Data as Confidential Information;
(iii) take all reasonable measures to ensure that Data is protected against loss and unauthorised:
   a. access;
   b. use;
   c. disclosure; or
   d. modification; and
(iv) ensure that any person who is given access to the Data is made aware of, and undertakes to comply with, the obligations in this clause.
14.4 Prevention of Money-laundering
The movement of money through the MFS Interoperability service which is or which forms part of the proceeds of any crime or which is intended to facilitate, aid or finance the commission of any crime is expressly prohibited.

Participants must ensure that all their staff responsible for the MFSi services comply with all Anti-Money Laundering (AML), Customer Due Diligence (CDD), Agent Due Diligence (ADD) and Counter Terrorist Financing (CTF) laws, regulations, standards or directives in force from time to time, including any guidelines, STRs, policies and procedures to that effect as may be issued by the Central Bank.

Participants will monitor and report any suspicious activity in relation to MFSi services under these rules to its Money Laundering Reporting Officer (MLRO) as the case may be who may eventually escalate the suspicious activity to the relevant law enforcement authority.

A Participant shall be entitled to terminate their participation in the MFSi service in the event that they or another Participant reasonably and in good faith determines that there has been a breach of AML obligations set out in these Standards.

14.5 Reporting
All reporting will comply with the Central Bank’s reporting requirements.
15 Appendix B - Compliance

15.1 Exemptions & Waivers

15.1.1 Waivers from the Standards
Participants may request a variance to allow non-compliance with a provision of the MFSi Standards, provided that it does not endanger the overall application of the Standards for other Participants. A variance will only be considered where there are special circumstances, which make such variance appropriate for the Participant requesting it, but not for Participants in general.

A request for a waiver must be submitted in writing to the AGB, together with a statement of the reasons for the request and any appropriate evidence.

If the waiver is granted, the applicable Participant must advise the AGB if the waiver is no longer required. The AGB may also modify or cancel the variance, with a reasonable period of notice.

15.1.2 Application for an Exemption
A Participant may apply for an exemption from a requirement in these rules.

An application for an exemption must include the following:

(i) the period for which the exemption is sought;
(ii) the date of the original exemption (if seeking an extension of an existing exemption);
(iii) the section(s) and requirement(s) of these Standards from which the Participant seeks an exemption;
(iv) a statement of the reason(s) for non-compliance;
(v) a risk rating applicable to the non-compliance;
(vi) a full description of any compensating controls that are offered as justification for the exemption; and
(vii) details of the Participant’s action plan to achieve compliance, including the expected date of achieving compliance.

Upon receipt of an application for an exemption, the AGB may require the Participant to provide additional information or evidence before it determines the application.

15.1.3 Determination of an Application for an Exemption
The AGB will determine an application for an exemption as soon as possible and will notify the applicant in writing of the outcome.

The AGB may grant an exemption:

(i) for a limited period of time; and/or
(ii) subject to conditions on the applying Participant’s activities pursuant, or related, to these Standards.

If the AGB grants an exemption, subject to compliance with any time period or conditions imposed, the Participant receiving the exemption is not required to comply with the relevant section(s) and requirement(s) of these Standards.
In determining an application for an exemption, the AGB will have regard to the reputation, integrity, security, reliability and stability of MFS Transactions, MFS Interoperability activities and/or the settlement resulting from them.

The AGB may, at any time, withdraw an exemption if in the AGB’s opinion the exemption poses a risk to the reputation, integrity, security, reliability and stability of MFS Transactions, MFS Interoperability activities and/or the settlement and clearing resulting from them.

Prior to making a decision to refuse an application for an exemption, to grant an exemption subject to conditions or to withdraw an exemption, the AGB must comply with the procedures set out in these Standards.

Any decision of the AGB in respect of an application for an exemption is final and binding.

15.2 Disclosure of Non-Compliance
Each Participant must disclose by notice in writing to the AGB:

(i) each and every instance of non-compliance with these Standards; and
(ii) its inability to comply with any section(s) or requirement(s) of the Standards, within 7 days of the Participant becoming aware of the non-compliance or its inability to comply.

15.3 Audits
Participants are required to use their annual statutory and internal audit processes to ensure compliance with these Standards, particularly with regard to security, business processes, operations and fraud.

A copy of the annual audit report as it relates to Interoperable MFS is to be provided to the Central Bank.

15.4 Suspension & Termination

15.4.1 Immediate Suspension
A Participant is suspended immediately upon:

(i) Any licenses relevant to these Standards as issued to the participant by the Central Bank being suspended or revoked.
(ii) becoming insolvent or making an arrangement or composition with creditors generally;
(iii) being wound up, dissolved or otherwise ceasing to exist;
(iv) failing to settle for the obligations it has incurred under these Standards.

Suspension under this clause will continue until the Participant ceases to be a Participant; or the AGB is satisfied that:

(i) the Participant is solvent and capable of settling for the obligations it incurs under these Standards on an on-going basis and the Participant has settled all outstanding obligations which it has incurred under these Standards; and
(ii) if capable of rectification, the Participant has rectified any breach of these Standards associated with its suspension.
15.4.2 Other reasons for Suspension
The AGB may suspend a Participant if:

(i) the Participant fails to comply with, or is incapable of complying with these Standards unless that MFSP has made the necessary application for waiver and or disclosure of non-compliance or
(ii) the Participant no longer satisfies the applicable requirements for membership set out in these Standards;
(iii) the Participant was admitted and then there is in the AGB’s opinion a material change in the Participant’s circumstances and such change requires the suspension of the Participant to preserve the reputation, integrity, security, reliability and stability MFS Transactions, MFS Interchange Activities and/or the settlement resulting from them;
(iv) the Participant requests that it be suspended;
(v) the Participant fails to pay any fees due to the AGB or another Participant.

Suspension will continue until the AGB is satisfied that the Participant has addressed the circumstance(s) that caused the suspension.

15.4.3 Effect of Suspension
While suspended a Participant is not entitled to:

(i) Vote on any matter tabled for AGB Decision
(ii) Participate in AGB discussions

15.4.4 Withdrawal of Participants
A Participant is allowed to withdraw as a Participant by giving the AGB 90 calendar days written notice.

15.4.5 Obligations of Cessation
If a Participant is suspended, expelled or withdrawn, the Participant will nevertheless remain liable for all its accrued and accruing obligations under these rules. There are no limits to this.

15.4.6 Compliance with these Standards
Any termination of a Participant will not affect any right or liability arising under these Standards prior to the date such termination takes effect or arising in respect of any act, matter or thing occurring prior to that date, including obligations to comply with any requirements relating to ceasing to be a Participant.

15.5 Liability for owned & controlled entities
An MFSP that owns or controls, is owned or controlled by, or is under common ownership or control of another entity is liable to all other MFSPs for all of that entity’s obligations under these membership rules and for all of the entity’s activities related to MFS Interoperability.

It is the responsibility of each Participant to assure the onward connection from the MFS Interoperability Service to any other entity or third parties for completing the transaction cycle.
15.6 Disclosures
Unless required to do so by law, no Participant may disclose, fully or partially, to any third party, any documentation, related to the fees and any other statistical information related to the operation of the MFS Interoperability Service.

For these purposes, confidential information shall include, but not be limited to, transaction volumes, charges, fees and any other statistical information related to the operation of the Interoperability Service.

Information not previously disclosed to the public concerning any Participant or Service that is under consideration for inclusion in the operation of the Interoperability Service.

15.7 Confidentiality
The AGB maintains these Standards on behalf of the MFSi Participants. These standards should be in the public domain and there should be encouragement to apply these standards in all exchanges of e-Value not only those where the parties are signatory to these guidelines.

Confidential information shall include transaction volumes and any other statistical information related to the operation of the Interoperability Service.
16 Appendix C - Arbitration

Formal Arbitration should only begin after all avenues of amicable dispute resolution have been exhausted.

In the event that any dispute has arisen and the Participants have not been able to settle the same, within thirty days (30), then any Participant involved in the dispute may elect to go to arbitration.

Each Participant shall appoint one arbitrator and the Participants involved in the dispute shall jointly appoint a chairperson. The three-person panel shall conduct the arbitration. The appointment of Arbitrators and other conditions of Arbitration will be defined in the commercial agreements.

To the extent permissible by Law, the determination of the majority Arbitrators shall be final, conclusive and binding upon the Participants.

Pending final settlement or determination of a dispute, the Participants shall continue to perform their subsisting obligations under these Standards.

Nothing in this Clause shall prevent or delay a Participants seeking urgent injunctive relief in a court having jurisdiction.
17 Appendix D - Warranties
At all times each Participant represents and warrants to all other Participants and the AGB that:

(i) it has the power to observe its obligations under these Standards; and
(ii) it performs its obligations in good faith;
(iii) except as contained in these Standards, it has not relied on any representation made by any other Participant or the AGB to induce it to become a Participant or otherwise act in accordance with these Standards; and/or
(iv) it has made (without reliance on any other Participant or the AGB) its own independent assessment of these Standards as being appropriate for its needs and requirements; and
(v) its obligations under these Standards are valid and binding on it.
## Exemption Application Form

Date of Request

<table>
<thead>
<tr>
<th>Section number of requirement</th>
<th>Requirement for which Participant is not in compliance</th>
<th>Reason for non-compliance</th>
<th>Risk (Potential impact)</th>
<th>Risk (Likelihood)</th>
<th>Mitigating actions</th>
<th>Residual risk</th>
<th>Action to be taken and timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section from the Standards or the Technical Operational and Security Standards</td>
<td>Type in the actual wording of the Requirement with which you are not complying</td>
<td>Describe the situation, including when and why out-of-compliance occurred.</td>
<td>Describe the risks the out-of-compliance situation poses &amp; its possible impact in terms of &quot;Low&quot;, &quot;Medium&quot;, &quot;High&quot;.</td>
<td>Describe the risks the out-of-compliance situation poses &amp; how likely it is to happen in terms of &quot;Low&quot;, &quot;Medium&quot;, &quot;High&quot;.</td>
<td>List the compensating controls that reduce the risk</td>
<td>&quot;Low&quot;, &quot;Medium&quot;, &quot;High&quot;.</td>
<td>List what you are doing to correct the non-compliance. For extension requests indicate the reason for seeking an extension and give a promised date of correction.</td>
</tr>
</tbody>
</table>

Agreement to Disclosure: Where applicable I authorise the A2A Governing Body to provide the Central Bank with a copy of this exemption request.

Name: ______________________  Position: ______________________  Signature: ______________________
19 Appendix F–Interpretation

Terms used in these Standards have the meaning given to them in the Constitution or any applicable laws. Where there is more than one meaning to a term in any applicable laws, the meaning in the most recent law will prevail.

The words in the Standards’ Glossary are commonly used in discussing MFS interoperability and have the meanings shown in the Glossary when used in these Standards, unless the contrary intention appears.
20 Appendix G–Clearing & Settlement Models
This appendix sets out four architectures that can be considered for Clearing and Settlement. Option 1 is shown in Section 9.3 as an example:

Option 1
Interoperability achieved through prefunded e-Value in Nostro / Vostro agent accounts, using API’s to facilitate bilateral clearing, using a Commercial bank or an RTGS as the ultimate settlement agent.

Option 2
Interoperability achieved through prefunded e-Value on internal account on own platform, using API’s to facilitate bilateral clearing and using a Commercial bank as the primary settlement agent.

Option 3
Interoperability achieved through prefunded e-Value on internal account on own platform, using API’s to facilitate bilateral clearing and using a RTGS as the primary settlement agent.

Option 4
Interoperability achieved through prefunded e-Value on internal account on own platform, using and MFS Switch to facilitate clearing and using a RTGS as the primary settlement agent.

Transaction steps and associated Account Transfers
① Debit “A” Agent Account
② Credit “A” Collection Account
③ Send DC Message via API Interface
④ Debit “A” Disbursement Account on Platform “B”
⑤ Credit “B” Agent Account
⑥ Settle
Transaction steps and associated Account Transfers
1 Debit Subscriber Account A
2 Credit Internal Suspense Account A
3 Send Credit Transfer to B via API
4 Credit Agent Account B
5 Debit Internal Suspense Account B
6 Flush Internal Suspense accounts A and B and Update NSI A
7 Send NSI A to Commercial Bank of A
8 Commercial Bank of A creates NSI
9 Commercial Bank of A sends NSI to RTGS
10 RTGS settles to MFS A and B's Commercial Banks
11 Commercial Banks Adjusts A and B's Trust Accounts
Transaction steps and associated Account Transfers
1 Debit Subscriber Account A
2 Credit Internal Suspense Account A
3 Send Credit Transfer to B via API
4 Credit Agent Account B
5 Debit Internal Suspense Account B
6 Flush Internal Suspense accounts A and B and Update NSI A
7 Send NSI A to RTGS
8 RTGS settles to MFS A and B's Commercial Banks
9 Commercial Banks Adjusts A and B's Trust Accounts
Transaction steps and associated Account Transfers

1. Debit Subscriber Account A
2. Credit Internal Suspense Account A
3. Send Credit Transfer to B via Switch
4. Switch Forwards Credit Transfer to B
5. Credit Agent Account B
6. Debit Internal Suspense Account B
7. Flush Internal Suspense accounts A and B
8. Switch creates NSI and sends the NSI A to the RTGS
9. RTGS settle to MFS A and B’s Trust Accounts
21 Appendix H: Business Models

This appendix sets out different business models that can be considered for the A2A Service. Option 3 is shown in Section 8.2 as an example:

- Sender pays;
- No Interchange;
- Receiver pays;

The business model that the AGB selects will depend upon their specific requirements.

21.1 Option 1 – Sender Pays

1. Wallet re-balancing: MFSP1’s agent sends e-Money from their MFSP1’s wallet to their MFSP2’s wallet.
2. Cash-in: the re-balancing enables agent to fulfill e-Money demand on their MFSP2’s wallet.
3. Send: MFSP2’s subscriber sends on-network e-Money to MFSP1’s subscriber and pays a sending fee to their provider MFSP2.
4. Cash-out: MFSP2’s subscriber withdraws e-Money from traceable payments and pays cash out fee to their provider MFSP2 who in turn pays commission to MFSP2 agent.
5. A2A mobile interchange: Sending MFSP1 pays A2A mobile interchange to receiving MFSP2.
21.2 Option 2 – No Interchange

- In a perfectly symmetrical market where the sending and receiving A2A volumes would be the same across all participants then a “no interchange model” could work.
- This very unlikely reality means that without interchange an imbalance is likely to arise leading to an unsustainable model.

![Diagram of Option 2 - No Interchange]

1. Wallet re-balance: MFSP1’s agent sends e-Money from their MFSP1’s wallet to their MFSP2’s wallet.
2. Send: MFSP2’s subscriber sends the e-Money to MFSP1’s subscriber and pays a sending fee to their provider MFSP2.
3. Cash-out: MFSP 2’s subscriber receives cash out and pays cash out fee to their provider MFSP2 who in turn pays commission to MFSP2 agent.

21.3 Option 3 – Receiver Pays

- In a perfectly symmetrical market where the sending and receiving A2A volumes would be the same across all participants then a “no interchange model” could work.
- This very unlikely reality means that without interchange an imbalance is likely to arise leading to an unsustainable model.

![Diagram of Option 3 - Receiver Pays]

1. Wallet re-balance: MFSP1’s agent sends e-Money from their MFSP1’s wallet to their MFSP2’s wallet.
2. Send: MFSP2’s subscriber sends on-network e-Money to MFSP1’s subscriber and pays a sending fee to their provider MFSP2.
3. Cash-out: MFSP 2’s subscriber receives cash out and pays cash out fee to their provider MFSP2 who in turn pays commission to MFSP2 agent.